

## SECTION 1013—ALUMINUM BRIDGE RAILING

**1013.1 DESCRIPTION**—This work is the construction of an aluminum bridge railing.

**1013.2 MATERIAL**—Before fabrication, submit shop drawings for review and acceptance.

**(a) Railing.**

- Cast Aluminum Railing Posts—[ASTM B 108](#), Alloy A444-T4 or [ASTM B 26/B 26M](#), Alloy SG70A-T6.
- Aluminum-Alloy Extruded Bars, Rods, Shapes, and Tubes—[ASTM B 221/B 221M](#), Alloy 6061-T6 or 6351-T5.
- Aluminum-Alloy Drawn Seamless Tubes—[ASTM B 210/B 210M](#)-Alloy 6061-T6.
- Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube—[ASTM B 241](#), Alloy 6061-T6, 6061-T4 or Aluminum-Alloy Extruded Structural Pipe and Tube [ASTM B 429](#), Alloy 6061-T6.
- Aluminum-Alloy Sheet and Plate—[ASTM B 209/B 209M](#)-Alloy 6061-T6, 1100-0 or Alclad 2024-T4.
- Aluminum-Alloy Bars, Rods, and Wire—[ASTM B 211/B 211M](#), Alloy 6061-T6, 6262-T9, or 2024-T4. (Alloy 2024-T4 with an anodic coating of 5 µm (0.0002 inch) minimum thickness and dechromate or boiling water seal.)
- Aluminum-Alloy Standard Structural Shapes, Rolled or Extruded—[ASTM B 308/B 308M](#)-Alloy 6061-T6
- Toggle Bolts—[Section 1014.2\(a\)](#)
- Miscellaneous—Aluminum wedges, shims, end caps, washers, and nuts of acceptable material.

Certify as specified in [Section 106.03\(b\)3](#).

**(b) Anchor Bolts, Nuts, and Washers.** [Section 1105.02\(c\)2](#), galvanized as specified in [Section 1105.02\(s\)](#).

**(c) Caulking Compound.** [Section 705.8](#)

**1013.3 CONSTRUCTION**—As shown on the [Standard Drawings](#) and as follows:

**(a) General.** [Section 1012.3\(a\)](#)

**(b) Assembly.** [Section 1012.3\(b\)](#) except:

At bend areas, do not vary the diameter of rail tubes by more than 5% of the outside diameter, when rail tubes are bent to the radii indicated.

**1013.4 MEASUREMENT AND PAYMENT**—Meter (Linear Foot)

Measured from center-to-center of end posts. The Department will not deduct gaps at lighting pole foundations.